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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/734,148

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EXAMINER

NGUYEN, LINH THI

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

05/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/734,148

Applicant(s)

KITAGAKI ET AL.

Examiner

Linh T. Nguyen

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5, 6 and 13-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurebayashi et al (US Publication Number 20040145993).

In regards to claims 1, 15, and 25, Kurebayashi et al discloses an information-recording method for recording information on an information-recording medium, the information-recording method comprising: moving a light beam at a selected linear velocity relative to the information-recording medium (Fig. 3); controlling the light beam to generate a multi-pulse (Fig. 3) having at least three power levels of a first power level P_h (Fig. 3, P_{bw}), a second power level P_1 which is lower than the first power level (Fig. 3, P_{b1}), and a third power level P_m (P_{b3}) which is intermediate there between (Fig. 3), the multi-pulse being repeatedly modulated between the first power level P_h and the third power level P_m (Fig. 3), the second power level P_1 being a crystallization level (Paragraph [0034], lines 12-17); adjusting the third power level P_m in response to the selected linear velocity (Fig. 3, speed increase the P_{b1} increases to P_{b3}); and recording the information by irradiating the information-recording medium with the controlled light

beam including the adjusted third power level to change a state of an irradiated portion of the information-recording medium (Column 4).

In regards to claim 2, Kurebayashi et al discloses the information-recording method according to claim 1, wherein the third power level P_m (P_{b3}) is adjusted so that the third power level P_m is increased in proportion to the linear velocity (Fig. 4).

In regards to claims 5 and 26, Kurebayashi et al discloses the information-recording method according to claim 1, wherein a ratio $(P_m - P_1)/(P_h - P_1)$ of a difference between the third power level P_m and the second power level P_1 with respect to a difference between the first power level P_h and the second power level P_1 is adjusted in response to the linear velocity (Fig. 4, equation below).

In regards to claims 6, 16, 17, 18, 19, 20 and 23, Kurebayashi et al discloses the information-recording method according to claim 5, wherein the ratio $(P_m - P_1)/(P_h - P_1)$ is adjusted so that the ratio $(P_m - P_1)/(P_h - P_1)$ is increased in proportion to the linear velocity (Fig. 4).

In regards to claims 21 and 22, Kurebayashi et al discloses the information-recording medium, wherein the management information includes values of the first power level P_H , the second power level P_1 , and the third power level P_m at a plurality of recording speeds respectively (Fig. 3).

In regards to claims 13 and 24, Kurebayashi et al discloses the information-recording method according to claim 1, further comprising reading the selected linear velocity from the information-recording medium before recording the information, wherein the information is recorded with the CLV system (Paragraph [0028]).

In regards to claim 14, Kurebayashi et al discloses the information-recording method according to claim 1, wherein the information is recorded with the CAV system, and the selected linear velocity differs depending on a position on the information-recording medium in which the information is recorded (Paragraph [0028]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurebayashi et al in view of Nishiuchi et al (US Patent number 5291470).

In regards to claims 7 and 8, Kurebayashi et al does not but Nishiuchi discloses the information-recording method wherein a pulse width of a leading pulse or a tail pulse of the multi-pulse is adjusted in response to the third power level P_m (Fig. 12 and 18). At the time of the invention it would have been obvious to a person of ordinary skill in

the art to modify the information-recording method of Kurebayashi et al to have pulse width of leading or tail pulse to vary depending on the erase power as suggested by Nishiuchi et al. The motivation for doing so would have to create less jitter.

In regards to claims 9 and 10, Kurebayashi et al does not but Nishiuchi et al discloses the information-recording method wherein a pulse width of a leading pulse or a tail pulse of the multi-pulse is adjusted in response to a ratio P_m/P_h so that the pulse width is increase in proportion to in response to the third power level P_m (Fig. 12 and 18; Column 12, lines 58-61). The motivation is the same as claim 7 above.

In regards to claim 11 and 12, Kurebayashi et al discloses the pulse ratio $(P_m - P_1)/(P_h - P_1)$ (Fig. 4). Kurebayashi et al does not but Nishiuschi et al discloses the method of varying the leading or tail pulse (Fig. 12 and 18). The motivation is the same as claim 7 above.

Response to Arguments

Applicant's arguments with respect to claims 1, 15, and 25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2627

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN
May 1, 2007



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER